PATENT SPECIFICATION

1,004,269

1,004,269

Date of Application and filing Complete Specification: December 15, 1961. *No. 45065/61.*

Application made in Norway (No. 138389) on December 16, 1960.

Complete Specification Published: September 15, 1965.

Index at Acceptance:—**B8** C (12E, 19H3, 24B3, 25B, 29B).

Int. Cl.:—B 65 b.

COMPLETE SPECIFICATION

DRAWINGS ATTACHED

Packaging Coiled Material

WE, STANDARD TELEPHONES AND CABLES LIMITED, a British Company, of Connaught House, 63 Aldwych, London, W.C.2., England, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:

The present invention relates to packaging of coiled material, and more particularly, of coilable elongated articles such as lengths of electric cable, tape, bandsaw blades and flexible tubing.

According to one aspect of the present invention there is provided a method of packaging a coilable elongated article comprising the steps of coiling said article on the outer circumferential surface of a central portion of a cylindrically shaped ring of cardboard or the like bendable material, the outer portions of which are provided with a suitable number of cuts extending from the outer edge of said outer portions towards said central position, bending the flaps thus provided between adjacent ones of said cuts around the coiled article to bring their outer edges closely together and sealing them together by the application of a circumferential tape or ring.

According to another aspect of the present invention. there is provided a method of packaging a coilable elongated article, comprising the steps of coiling said article on the outer circumferential surface of a central portion of a cylindrically shaped ring of cardboard or the like bendable material, the outer portions of which are provided with a suitable number of cuts extending from the outer edge of said outer portions towards said central portion, after bending the flaps thus provided between adjacent ones of said cuts to extend radially outwards from said ring, then bending said flaps around the coiled article to bring their outer edges closely together and sealing them together by the application of a circumferential tape or ring.

Embodiments of the invention will now be particularly described with reference to the accompanying drawings, in which:—

Fig. 1 shows a perspective view of a packaged coiled article;

Figs. 2a, *b* and *c* show radial cross-sections through the packaged article shown in Fig. 1, when the packaging is respectively sealed, unsealed and opened for permitting the removal of a portion of the coiled article;

Figs. 3*a*, *b* and *c* show diverse examples of how the outer portions of the packaging material may be cut; and

Figs. 4*a*, *b*, *c* and *d* show diverse examples of the radical cross-sections through the packaged article.

In Fig. 1, a packaged article is shown in a packaging 1, which is sealed by a tape 2 as is also illustrated in Fig. 2a. The packaging 1 may consist of cardboard or the like bendable material, such as corrugated paper, plastic sheeting or metallic foil. The tape 2 is a flexible ring surrounding the package and sealing together the ends of flaps, that had been bent around the coiled article. When the package is to be opened, the tape 2 is split along its length around the circumference of the package, so that the ends of the flaps 3 are held together by one half of the tape and the ends of all the other flaps 4 are held together by the other half of the tape as is illustrated in Fig. 2b. For the opening of the package, it may be placed on either of its sides, i.e. with its cylindrical axis in a vertical position. The upper side of the packaging is now bent up, so that it extends as a collar, as shown in

[Price 4s. 6d.]

Fig. 2c, and the desired length of the coiled article is unwound from the coil. After the desired length of the article has been cut off, the upper side of the packaging is pushed back, so that it resumes the shape illustrated in Fig. 2b.

In Figs. 1 and 2, the outer portions of the package blank are shown as having cuts extending from the outer edges to the central portions in the same direction as the axis of the cylinder formed by the central portion, as illustrated in Fig. 3a, but these cuts may have nearly any inclination to that axis, i.e. any inclination other than an inclination of 90° or nearly as much. Examples of these cuts, between adjacent ones of which the individual flaps 3 and 4 are provided, are shown in Fig. 3.

The package shown in Figs. 1 and 2, has a radial cross-section of rectangular shape, as illustrated in Fig. 4a, but this cross-section may have nearly any shape to which the flaps may reasonably be bent, according to the material used for the packaging. Examples of different shapes of this radial cross-section are shown in Fig. 4.

In order to facilitate the opening of the package, a "stripping wire" or rip cord may be provided under the tape 2. The rip cord is preferably inserted between the adjacent edges of the flaps 3 and 4 before the application thereover of the tape 2.

The most convenient shape of the package is a cylindrical ring of circular shape, but the shape may, of course, be distorted before or after coiling of the article to an elliptical, oval or nearly rectangular shape.

WHAT WE CLAIM IS:—

1. A method of packaging a coilable elongated article comprising the steps of coiling said article on the outer circumferential surface of a central portion of a cylindrically shaped ring of cardboard or the like bendable material, the outer portions of which are provided with a suitable number of cuts extending from the outer edge of said outer portions towards said central portion, bending the flaps thus provided between adjacent ones of said cuts around the coiled article to bring their outer edges closely together and sealing them together by the application of a circumferential tape or ring.

2. A method of packaging a coilable elongated article, comprising the steps of coiling said article on the outer circumferential surface of a central portion of a cylindrically shaped ring of cardboard or the like bendable material, the outer portions of which are provided with a suitable number of cuts extending from the outer edge of said outer portions towards said central portion, after bending the flaps thus provided between adjacent ones of said cuts to extend radially outwards from said ring, then bending said flaps around the coiled article to bring their outer edges closely together and sealing them together by the application of a circumferential tape or ring.

3. A method as claimed in either claim 1 or claim 2, wherein said flaps are bent in such a manner that the radial cross-section through the package has the shape of a triangle, a rectangle or a pentagon.

4. A method as claimed in any one of the preceding claims, wherein said cuts extend in substantially the same direction as the axis of the cylinder formed by the central portion of said ring.

5. A method as claimed in any one of the preceding claims, comprising the further steps of inserting rip cord under said circumstantial tape in order to facilitate the opening of the package.

6. A method of packaging a coilable elongated article, substantially as herein described with reference to the accompanying drawings.

7. A package for a coiled elongated article produced by a method as claimed in any one of the preceding claims.

8. A package for a coilable elongated article, substantially as herein described with reference to the accompanying drawings.

9. A blank for a package as claimed in either claim 7 or claim 8, and substantially as herein described with reference to Fig. 3 of the accompanying drawings.

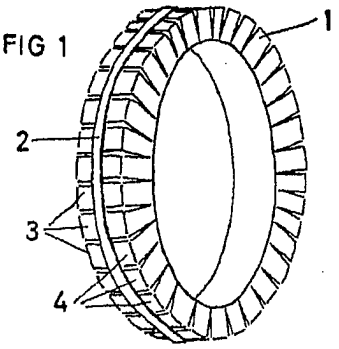
G. H. EDMUNDS,
Chartered Patent Agent.
For the Applicants.

Berwick-upon-Tweed: Printed for Her Majesty's Stationery Office by The Tweeddale Press Ltd.—1965
Published at The Patent Office, 25 Southampton Buildings, London, W.C.2 from which copies may be obtained.

1,004,269 COMPLETE SPECIFICATION
1 SHEET

This drawing is a reproduction of the Original on a reduced scale.

FIG 1



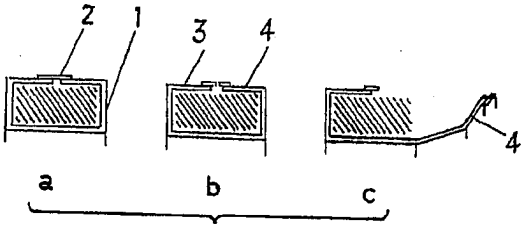


FIG 2

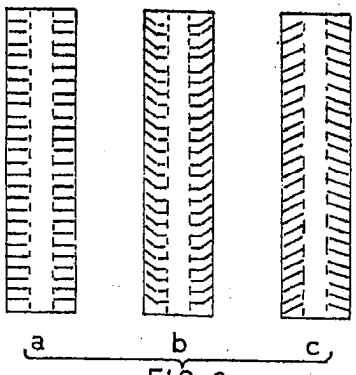


FIG 3

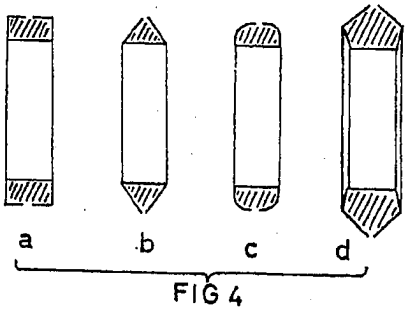


FIG 4